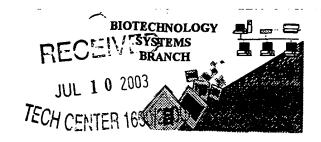
Raw Sequence Listing Error Summary

ERROR DETECTED	suggested correction serial number: 09/852,922 A
ATTN: NEW RULES CAS	ses: Please disregard english "Alpha" Headers, which yere inserted by Pto Softwari
1Wrapped Nucleica Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3 Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers. It use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6PatentIn 2.0 "bug"	A "bug" in Patentin version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, Patentin would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unions in sequences.
7Skipped Sequences (OLD RULES)	Sequence(s)missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to Include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n'a or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10 U Invalid <213> Response	Per 1.823 of Sequence Rules, the only valld <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or high strifficial Sequence
11Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of Patentin version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy life to floppy disk.
13Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

AMC/MH - Biotechnology Systems Branch - 08/21/200



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 0,9/852,922A.

Source: /600

Date Processed by STIC: 7/2/2003

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A

FOR CRESUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER; 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 40 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS.

http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence histing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses.

- L EFS Bio (≼http://www.uspto.gov/ebc/efs/downloads/documents.htm≥, EFS Submission User Manual-epave)
 - 2. U.S. Postel Service: Commissione for Patents P.O. Box 1450; Alexandria, VA 22313-1450
 - S. Hand County (firecity to).

 1. U.S. Patengand Trademark Office Technology Center 1600, Reception Area, 7th Floor, Examiner Name,

 Sequence Information, Crystal Malf One, 1911 South Clark Street, Arlington, VA 22202
 - US Patentand Trademark Office Box Sequence Customer Window, Lobby, Room 1B03, Crystal Plaza Two,
- 4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1803-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003



1600

RAW SEQUENCE LISTING

DATE: 07/02/2003

PATENT APPLICATION: US/09/852,922A

TIME: 07:42:37

Input Set : A:\20011FUS.txt

Output Set: N:\CRF4\07022003\1852922A.raw

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3 <110> APPLICANT: TOYO BOSEKI KABUSHIKI KAISHA
      5 <120> TITLE OF INVENTION: MODIFIED THERMOSTABLE DNA POLYMERASE
      7 <130> FILE REFERENCE: 000053
C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/852,922A
C--> 9 <141> CURRENT FILING DATE: 2001-05-10
      9 <150> PRIOR APPLICATION NUMBER: JP2000-138796
     10 <151> PRIOR FILING DATE: 2000-05-11
     12 <160> NUMBER OF SEQ ID NOS. 6
     14 <170> SOFTWARE: PatentIn version 3.1
                                                            changed
     16 <210> SEQ ID NO: 29
                                                                        Doos Not Comply
     17 <211> LENGTH: 13
                                                                            Listings must
'egin with
                                                                   Coffected Diskette Needec
     18 <212> TYPE: PRT
     19 <213> ORGANISM: Pyrococcus
     21 <400> SEQUENCE: (29)
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     40 <212> TYPE: PRT
     41 <213> ORGANISM: Thermococcus
                                                                           (Sel 1.821 of
Seguerce Rules)
     43 <400> SEQUENCE / 31'
     45 Leu Leu Ala Phe Asp Ile Glu Thr Phe Tyr His Glu Gly
    46 1
    49 <210> SEQ ID NO: 32
                                                             Also, per 1.825 d)

"Any anerdnest...

"Any anerdnest...

[must][include]

u all previously submitted

data with other

anerdnest incorporated therein...

7/2/03
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    51 <212> TYPE: PRT
    52 <213> ORGANISM: Sulfolobus
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    62 <212> TYPE: PRT
    63 <213> ORGANISM phage
    65 <400> SEQUENCE:
    67 Met Ile Val Ser Asp Ile Glu Ala Asn Ala Leu Leu Glu
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RAW SEQUENCE LISTING

DATE: 07/02/2003

PATENT APPLICATION: US/09/852,922A

TIME: 07:42:37

Input Set : A:\20011FUS.txt

Output Set: N:\CRF4\07022003\1852922A.raw

68 1 10 71 <210> SEQ ID NO: (34) 72 <211> LENGTH: 13 73 <212> TYPE: PRT/ 74 <213> ORGANISM: phage 76 <400> SEQUENCE: 34 78 Val Ala Asn Cys Asp Ile Glu Val Thr Gly Asp Lys Phe VERIFICATION SUMMARY

DATE: 07/02/2003

PATENT APPLICATION: US/09/852,922A

TIME: 07:42:38

Input Set : A:\20011FUS.txt

Output Set: N:\CRF4\07022003\1852922A.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date